

CLAIMS

1. A system for detecting an object while reversing a vehicle and providing an indication to the driver of the proximity of the object comprising sensor means for detecting an object in the path of a reversing vehicle, radio frequency transmitter means in communication with the sensors means for transmitting a signal representative of the distance of the object detected by the sensor means from the vehicle, and radio frequency receiver means for receiving the signal from the transmitter means and generating a visual and/or audible indication to the driver of the proximity of the detected object relative to the vehicle, wherein at least one of the transmitter means and receiver means is detachable for transfer between vehicles.
2. A system according to claim 1 wherein a visual indication is provided by a plurality of lights which are progressively illuminated to indicate a reduction in the distance between the object and the vehicle.
3. A system according to claim 1 wherein an audible indication is provided by intermittent beeps which become progressively faster to indicate a reduction in the distance between the object and the vehicle.
4. A system according to claim 2 in which all the lights are illuminated at a predetermined distance between the object and the vehicle.
5. A system according to claim 3 in which the beep becomes a continuous tone at a predetermined distance between the object and the vehicle.
6. A system according to claim 1 in which the transmitter is detachable for changing the mounted position.
7. A system according to claim 6 in which the transmitter is mountable on a vehicle or a trailer towed by the vehicle.
8. A system according to claim 1 in which the receiver is mountable on the front of the vehicle.

9. A system according to claim 1 arranged to switch on and monitor the distance to objects when reverse gear is selected.

10. A system according to claim 1 arranged to indicate objects within a 1-m. range of the rear of the vehicle.

11. A system according to claim 1 wherein the transmitter is connected to the light circuit.

12. A system according to claim 1 wherein the receiver is connectable to a cigarette lighter socket.

13. A reversing aid for fitment to a vehicle comprising:

- at least one sensor for fitment on or adjacent an exterior of the vehicle to sense the proximity of an object;
- a wireless transmitter in communication with said sensor to receive a signal representative of the proximity from said sensor and transmit a further representative signal;
- a receiver to receive said representative signal from said transmitter; and
- indicating means in communication with said receiver to provide a driver with an indication of the proximity of an object in accordance with the signal received by said receiver.

14. A reversing aid for fitment to a vehicle as claimed in claim 13 wherein at least said wireless transmitter is demountable from a fixing to said vehicle.

15. A reversing aid for fitment to a vehicle as claimed in claim 14 wherein said demountable fixing comprises a mounting bracket attachable to a vehicle to receive said transmitter to accommodate connection between said transmitter and at least one signal carrying communication path from said at least one sensor.

16. An object proximity detection system for a vehicle including:

- at least one proximity sensor unit fittable to an exterior portion of a vehicle;

- a wireless transmitter unit in communication with said proximity sensor to receive signals from said sensor and transmit signals in accordance with the detection by the sensor;
- at least one receiver unit capable of receiving wireless transmissions from said wireless transmitter;
- an indicating means communication with said receiver to provide a driver with an indication of objects sensed by the sensors as transmitted by the transmitter and received by the receiver; and
- wherein said sensor and said transmitter are incorporated in a housing for fitment to a vehicle together.

17. An object proximity detection system as claimed in claim 16 wherein said housing is substantially secure against the ingress of water in use.

18. An object proximity detection system as claimed in claim 16 wherein said housing includes a front plate on or in which said at least one sensor may be mounted.

19. An object proximity detection system as claimed in claim 18 wherein said transmitter is enclosed in said housing behind said front plate.

20. An object proximity detection system as claimed in claim 16 wherein said housing includes fitment means for fitment to a bumper of a vehicle.

21. An object proximity detection system as claimed in claim 16 wherein at least one wire for connection to a power source extends from said housing for attachment to a power source on said vehicle.

22. An object proximity detection system for a vehicle including:

- at least one proximity sensor for attachment to an exterior of a vehicle;
- at least one transmitter unit in communication with said sensor to transmit signals in accordance with objects detected by said sensor;
- at least one receiver unit to receive signals from said transmitter;
- at least one indicating means to provide a driver with indication of objects sensed by said sensor; and

wherein said receiver unit includes switching means such that said indicating means may provide a driver with an indication of objects sensed by sensors on a towed vehicle and discontinue indicating objects sensed by proximity sensors on the towing vehicle.

23. An object proximity detection system as claimed in claim 22 wherein said system includes a receiver within cabin of the vehicle connectable to sensors on a rear of a vehicle and, in a second configuration, able to receive and indicate signals from sensors on a towed vehicle.

24. An object proximity detection system as claimed in claim 22 wherein said switching means configures said receiver to receive signals from sensors on said towed vehicle via a wireless transmitter.